Claims

- [c1] What is claimed is:
 - 1. Optical recording media having a scratch-off material layer comprising:
 - a transparent substrate;
 - a reflective layer formed on the transparent substrate;
 - a protective layer formed on the reflective layer;

information formed on a surface of the protective layer; and

at least one opaque scratch-off material layer formed on the protective layer for

disguising the information.

- [c2] 2.The optical recording mediaof claim 1 wherein the optical recording mediacomprises a Compact Disc (CD), a CD-Recordable (CD-R), a CD-Recordable/Write (CD-RW), a Video CD (VCD) and a Digital Video Disc (DVD).
- [c3] 3.The optical recording media of claim 1 wherein the transparent substrate comprises a central opening and a plurality of pits surrounding the central opening spirally for storing digital information.
- [c4] 4.The optical recording media of claim 1 further comprising a printing layer formed on the protective layer.
- [c5] '5. The optical recording media of claim 4 wherein the information is formed on a surface of the printing layer.
- [c6] 6.The optical recording media of claim 1 wherein the reflective layer comprises gold (Au), silver (Ag), aluminum (Al), copper (Cu), platinum (Pt), chromium (Cr) alloy and aluminum nitride (AlN $_{\rm X}$), and the protective layer comprises acrylic resin, polycarbonate (PC) resin, ultraviolet (UV) curing resin, diamond-like carbon (DLC), metal nitride (A $_{\rm X}$ N $_{\rm 1-X}$), metal oxide (A $_{\rm X}$ O $_{\rm 1-X}$), silicon nitride (SiN $_{\rm X}$), silicon oxide (SiO $_{\rm S}$), sulfide zinc-silicon dioxide (ZnS-SiO $_{\rm Z}$), titanium oxide (TiO $_{\rm X}$) and carbide.
- [c7] 7.The optical recording media of claim 1 wherein the scratch-off material layer is a silver lacquer layer.
- [c8] 8.The optical recording mediaof claim 1 wherein the scratch-off material layer

comprises elastomeric resin, organic solvent, powder additive and pigment.

- [c9] 9.The optical recording media of claim 1 wherein the information comprises at least one serial number, secret code and rewarding information, composed of characters or pattern signs.
- [c10] 10.The optical recording media of claim 1 wherein the information is formed on a predetermined region of the surface of the protective layer, and the scratch-off material layer covering the information has a specific shape.
- [c11] 11. The optical recording media of claim 10 wherein the specific shape comprises a geometric shape and a non-geometric shape.
- [c12] 12. Optical recording media having a scratch-off material layercomprising:

 a transparent substrate comprising a first recordable region for recording a first specific data and a second recordable region for recording a second specific data;
 - a reflective layer formed on the transparent substrate;
 - a protective layer formed on the reflective layer, and not covering the second recordable region; and
 - at least one opaque scratch-off material layer formed on the protective layer and covering the second recordable region;
 - wherein when the scratch-off material layer is not scratched, the second specific data is a readable data, and when the scratch-off material layer is scratched, the first specific data is a readable data and the second specific data is a non-readable data.
- [c13] 13.The optical recording media of claim 12 wherein the transparent substrate comprises a central opening and a plurality of pits surrounding the central opening spirally for storing digital information.
- [c14] 14.The optical recording media of claim 12 wherein the reflective layer covers the transparent substrate outside the second recordable region, and the optical recording media further comprises a reflective film formed on the second recordable region for being a reflective interface of the second recordable region.

- [c15] 15.The optical recording media of claim 14 wherein a bonding ability between the reflective film and the second recordable region is weaker than a bonding ability between the reflective layer and the transparent substrate, and when the scratch-off material layer is scratched, the reflective film on the second recordable region is destroyed and scratched simultaneously, thus causing the second specific data to be non-readable data.
- [c16] 16.The optical recording mediaof claim 14wherein the reflective film is a semi-reflective film, and when the scratch-off material layer is scratched, the reflective film on the second recordable region cannot reflect totally, thus causing the second specific data to be non-readable data.
- [c17] 17.The optical recording media of claim 12 wherein the reflective layer does not cover the second recordable region, and the scratch-off material layer has a high reflectance for being a reflective interface of the second recordable region.
- [c18] 18.The optical recording media of claim 12 wherein the reflective layer covers the transparent substrate and the second recordable region completely.
- [c19] 19.The optical recording media of claim 18 further comprising a sacrificial layer formed between the second recordable region and the reflective layer, and when the scratch-off material layer is scratched, a portion of the reflective layer on the second recordable region is destroyed and scratched simultaneously, thus causing the second specific data to be non-readable data.
- [c20] 20.The optical recording media of claim 19 wherein a bonding ability between the reflective layer and the sacrificial layer is weaker than a bonding ability between the reflective layer and the transparent substrate.
- [c21] 21.The optical recording media of claim 19 wherein a bonding ability between the sacrificial layer and the transparent substrate is weaker than a bonding ability between the reflective layer and the transparent substrate.
- [c22]

 22.The optical recording media of claim 12wherein the reflective layer comprises gold (Au), silver (Ag), aluminum (Al), copper (Cu), platinum (Pt), chromium (Cr) alloy and aluminum nitride (AlN x), and the protective layer comprises acrylic

resin, polycarbonate (PC) resin, ultraviolet (UV) curing resin, diamond-like carbon (DLC), metal nitride (A $_{\rm X}$ N $_{\rm 1-x}$), metal oxide (A $_{\rm X}$ O $_{\rm 1-x}$), silicon nitride (SiN $_{\rm X}$), silicon oxide (SiO $_{\rm S}$), sulfide zinc-silicon dioxide (ZnS-SiO $_{\rm 2}$), titanium oxide (TiO $_{\rm Y}$) and carbide.

- [c23] 23.The optical recording media of claim 12 further comprising a printing layer formed on the protective layer.
- [c24] 24.The optical recording media of claim 23 wherein the printing layer covers a portion of the second recordable region, and the printing layer comprises at least one serial number, secret code and rewarding information, composed of characters or pattern signs, printed in the printing layer.
- [c25] 25.The optical recording media of claim 24 wherein the second specific data comprises at least one checking program for requesting users to input and for verifying the serial number or the secret code printed in the printing layer above the second recordable region.
- [c26] 26.The optical recording media of claim 12 wherein the scratch-off material layer is a silver lacquer layer.
- [c27] 27.The optical recording media of claim 12wherein the scratch-off material layer comprises elastomeric resin, organic solvent, powder additive and pigment.
- [c28] 28.The optical recording media of claim 12 wherein the scratch-off material layer has a specific shape.
- [c29] 29.The optical recording media claim 28 wherein the specific shape comprises a geometric shape and a non-geometric shape.
- [c30] 30.The optical recording mediaof claim 12 wherein when the scratch-off material layer is not scratched, the second specific data is read and executed before the first specific data.
- [c31] 31.The optical recording media of claim 30 wherein the second specific data that is read before the first specific data will influence a readable completeness of the first specific data.

- [c32] 32.The optical recording media of claim 31 wherein the second specific data comprises an error information generating program, a loop program, asecret code checking program, a network on-line program, a time checking program and an error configuration information of the optical recording media.
- [c33] 33.The optical recording media of claim 30 wherein the second specific data comprises an installed program for installing a program of the first specific data and an installed serial number.
- [c34] 34.The optical recording media of claim 33 wherein the first specific data further comprises at least one checking program for verifying the installed serial number of the second specific data while installing the program of the first specific data.
- [c35] 35.The optical recording media of claim 34 wherein the second specific data further comprises an uninstalled program and an interrupted program.
- [c36] 36.The optical recording media of claim 35 wherein when the program of the first specific data is executed while the scratch-off material layer is not scratched, the uninstalled program will uninstall the program of the first specific data.
- [c37] 37.The optical recording media of claim 35 wherein when the program of the first specific data is executed while the scratch-off material layer is not scratched, the interrupted program will interrupt the program of the first specific data.
- [c38] 38.The optical recording mediaof claim 12 wherein the optical recording mediacomprises a Compact Disc (CD), a Video CD (VCD) and a Digital Video Disc (DVD).